# FLIPPY DISCS

Many of you may have heard the Term "Flippy Diskettes," or seen them advertised in the Computing magazines.

Basically a "Flippy" diskette is a floppy diskette that you can turn over and record on both sides. (That reminds me, has anyone seen those "Go Floppy" T-Shirts lately?)

Commercial Flippies can be had heard that Kelly Data had some, but for those with small budgets and a willingness to take risks, there is the "Do It Yourself Flippy."

### THE RISKS

I have not had this experience, however some sources (who are in a position to profit from your believing them) will tell you that a flippy has a 1000 greater chance of loosing some data, due, I suppose, to the fact that the magnetic media are passing the recording heads in both directions. Reel to Reel and Cassette Audio tapes do this all the time, but we may have a different situation here.

Also there is the chance that there are dropouts in the recording surface that will cause a loss of data, but this will be covered later.

# MAKING A FLOPPY FLIPPY (or a flippy floppy)

First you must know that holes need to be put in the hard plastic casing surrounding your diskette. Look at a diskette, and notice the write protect notch, and the 1/4" timing hole near the center. If you rotate the diskette inside it's slieve, you will see the timing hole. Your diskettes are soft sectored" so you will see only one hole; hard sectored diskettes have 10, 14, or 16 holes. The drive needs to see this hole every revolution to know where the memory locations are. Now turn the diskette over, and you will see that the existing holes have changed positions. The drive will never see a timing signal now because there are no holes in the casing for the light sensor.

If you put a diskette upside down into a drive and tried to use it, you would find that the Drive is not seeing the timing light and it believes that you have put a write protect strip over the write protect notch. In other words it won't work, unless you make some new holes.

## MAKING IT WORK

To make your floppy a flippy, you need to poke and cut holes in the diskette casing to give the drive exactly the same signals when the diskette is upside down, as well as when it's right side up

TOOLS NEEDED

- \* The tools you need to do this are:
- \* A pattern—to accurately mark the places to cut your floppy
- \* A soft tip, fine point marking pen
- \* A standard hole punch

#### THE PATTERN

The best pattern is an old dead diskette. if you are only paying \$3. or so for Diskettes, and you don't have any dead ones, kill a good one by removing the part inside that rotates.

Go to J.K. Gills or any office supply store and buy a standard hand held paper punch...the type that make 1/4' round holes, and buy one with a plastic paper catcher. The paper catcher is important, because it will protect the magnetic surface from being scratched by the metal of the punch, and keep the punched out material from becomming fouled inside the diskette.

Place the pattern casing perfectly over a new floppy and trace the write protect notch and timing holes oposite to where they are now on both sides of the new diskette. Be sure to use a soft tip marker so that you don't damage the diskette.

To get perfect allignment, you can put two nails in a board spaced exactly the same distance as the two small notches near the opening of the diskette, then snug the pattern and the target diskette up to the nails. Another technique is to snug the pattern and the target into a perfect 90 degree corner...like the bottom of a drawer or a shallow box lid.

Once you have marked both sides of the target, you are ready to punch holes.

Do the write protect notch first, because it is easier, and more forgiving of mistakes. You 'll find that you will need to make two staggered punches to make a notch deep enough without ragged edges. If you don't get it perfect the first time, it's OK, it won't hurt.

The next step will be the timing hole.

## DO NOT PUNCH THROUGH THE ENTIRE DISKETTE!!!!!!

There are three layers there, and you only want to go through the outside two. Slip the thin part of the punch between the magnetic disk and the casing, position it as accurately as you can over the marking for that hole, and punch. If there is any of the pattern marking left, punch again and get it. Turn your target diskette over and punch the other side the same way.

You may see a white fuzzy material in these holes that was not cut by your punch. That's normal but you must remove it or it will block the timing signal light. I use tweezers.

Now format the B side of your diskette, and watch the FFFFF...VVVVVprogression on the screen during the formatting process. If you get no errors (E's or Numbers), you have a new diskette to use...nearly for free.

If you DO get errors, try formatting again, and don't hesitate to use the other drive. If you still get errors, then there is a defect on that side of your diskette, and you must place a write protect notch over that side of that diskette or you may loose something valuable there someday. No harm done though, the A side of the Diskette will still work perfectly, provided that it formatted properly (you DO format all new diskettes as soon as you open the box don't you?) I find that I get about one failure in about every 40 diskettes.

There you have it.

Twice the data storage at no extra cost.

THIS SORT ROUTINE IS FOR SORTING LARGE QUANTITIES OF DATA THAT ARE NOT IND REM IN ALPHABETICAL ORDER AND NOT NEARLY SO. IT IS FASTER THAN A BUBBLE SORT F 110 REM OR THIS PURPOSE, suppose I see a 1000 greater chance of loosing some data, due I suppose, SPORTHIS PURPOSE, the fact that the magnetic media are passing the recording heads in both directions. Reel to Reel and Cassette 120 N=0 130 PRINT "SORT PROGRAM":::::: Advantage of the state of 140 DIM N\$ (50) 150 N=N+1 160 INPUT "NAMES TO SORT. 'XX' TO STOP ": N\$ (N) 170 IF N\$(N) = "XX" THEN 190 First you must know that holes need to be put-in the hard plastic easing surrounding your diskette. Look 0C1 0T00 081 at a diskette, and notice the write-project notels, and the 1/4" timing hole near the center. If you rotate: N=M 0C1 190 M=N The desette made it's altern you will see the timing hole. Your diskettes are soft sectored" so you will (S\M) TNI=M 00S 210 IF M=0 THEN 360, you have been and the diskette over and you want of exiting 220 K=N-M 230 J=1 240 I=J 250 L=I+M 260 IF N\$(I)>N\$(L)THEN 300

270 J=J+1

To make your hoppy a hippy, you need to pole and cut holes in the diskette casing to give the drive 280 IF J>K THEN 200 u abstract the series and down as first as when it's right and u languages and viral as

290 GOTO 240 300 X\$=N\$(I)

310 N\$(I)=N\$(L)

320 N\$(L)=X\$

330 I=I-M

340 IF I (1 THEN) 270 no settle left of the past of the first of the f

370 PRINT N\$ (P) : d Instrogental radices, ragge out radices range of rates and you box saled hours Avradant

380 NEXT P

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1. K-MART require computer literate persons to assist selling their Timex-Sinclaire Computer. .... 20 Hrs/week for 6-8 weeks. The later of the later of the later to be a second of the later of th Ask Bob Chase for details and contact. don't set it serlect the first time, it's OK, if won't hart.

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2. Lessons Offered: # Intro to the TI-99/4A Computer and Periferals \$10.00 # Intro to T.I. BASIC. 5 lessons over 5 weeks \$50.00

Call Sidney Mirsky (503) 646-1858 for details and registration.

3. Bob says the book "BASIC FUN" available at book stores is definitely worth looking into.